a.) Claim 1

Claim 1 is an independent claim for a segment of sheet piling with two elements: a plurality of panels that are joined together at an angle; and a re-enforcement with a convex cross-sectional area that is located in the angle between the panels. An overhead view of two joined segments **10a** and **10b** is shown in Figure 1 of the application. Figure 2 shows a detailed view of the corner **14** between two panels **12** of the sheet piling segment. The re-enforcement **22** is centered on the corner **14**. It has a convex cross-sectional shape that maximizes the strength of the corner while optimizing the use of materials. The convex shape helps prevent bulging and rupturing of the sheet panel segments at the corners. *See* Pages 4 – 5, Paragraph 19 of the Present Application.

In contrast, Dougherty shows a sheet piling segment with a concave cross-sectional shaped re-enforcement. As shown in Dougherty's Figure 1, the re-enforcements **20** and **21** are a concave shape that generally follows the line of the angle between the panels **17 - 19**. The Examiner acknowledges the concave shape shown by Dougherty in Section 2 of the Office Action.

The convex shape of the present invention deviates significantly from the line of the angle between the panels with an outward curve as shown in Figures 1 and 2. It is a significant addition of material that provides greater strength and durability to the corner of the sheet piling segment. It is clear when comparing the teachings of Dougherty with Claim 1 that a convex and a concave shape for a re-enforcement are not the same thing. Consequently, the anticipation rejection on the basis of Dougherty fails with respect to Claim 1 for at least these reasons.

b.) Claims 3-6

Claims 3 – 6 are dependent claims. Each of these claims depends either directly or indirectly from independent Claim 1. Consequently, the anticipation rejection on the basis of Dougherty fails with respect to Claims 3-6 for at least the reasons stated in Section 1.a.

c.) *Claim 7*

Claim 7 is an independent claim for a segment of sheet piling with two elements: a plurality of panels that are joined together at an angle; and a means for re-enforcing the corner formed by the panels. The second element of Claim 7 related to the re-enforcement of the corner is written in the "means-plus-function" format as allowed by 35 U.S.C. §112 ¶6. It is well settled that, "a claim limitation expressed in the means-plus-function language 'shall be construed to cover the corresponding structure described in the specification and equivalents thereof'". M.P.E.P. §2181, Pages 216-217 of Section 2100.

For Claim 7, the corresponding structure in the specification is a re-enforcement with a convex cross-sectional area. *See* Pages 4 – 5, Paragraph 19 of the Present Application. As discussed previously in Section 1.a., Dougherty shows a concave shaped re-enforcement while the present invention is claimed with a convex shaped re-enforcement. Consequently, the anticipation rejection on the basis of Dougherty fails with respect to Claim 7 for at least these reasons.

d.) *Claim 8*

Claim 8 is dependent claim that depends directly from independent Claim 7. Consequently, the anticipation rejection on the basis of Dougherty fails with respect to Claim 8 for at least the reasons stated in Section 1.c.

2.) *Rejection of Claims 1 and 3-8 under 35 U.S.C. § 103(a) for Obviousness*

The Examiner has rejected Claims 1 and 3-8 as being obvious over Dougherty in view of what is an obvious to one of ordinary skill in the art. Specifically, the Examiner asserts that the use of a reinforcement area with a convex shape to provide rigidity at the angle connecting two panels is an obvious matter of design choice.

In response, Applicant notes that 37 C.F.R. §1.104(d)(2) states:

When a rejection in an application is based on facts within the personal knowledge of an employee of the Office, the data shall be as specific as possible, and the reference must be supported, when called for by the applicant, by the affidavit of such employee, and such affidavit shall be subject to contradiction or explanation by the affidavits of the applicant and other persons.

In accordance with this rule, Applicant requests that the Examiner submit an affidavit stating that based on his personal knowledge, it is a well known design choice to one of ordinary skill in the art to use a reinforcement area with a convex shape to provide rigidity at the angle connecting two panels consistent with Claims 1 – 8. In the alternative, Applicant requests that the Examiner withdraw this rejection.

3.) *Rejection of Claim 2 under 35 U.S.C. § 103(a) for Obviousness*

The Examiner has rejected Claims 2 as being obvious over Dougherty in view of Lewis. The Examiner states that Dougherty discloses the claimed invention except for the sheet piling being made from anisotropic materials. The Examiner further states that Lewis teaches the use of such materials and that it would be obvious to one of ordinary skill in the art at the time of invention to combine the two references.
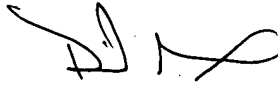
Claim 2 is a dependent claim that depends directly from independent Claim 1. As discussed previously in Section 1.a., Applicant has shown the Dougherty does not disclose the claimed invention. Dougherty teaches a concave shaped re-enforcement in contrast to the present invention that claims a convex shaped re-enforcement. Consequently, the obviousness rejection over Dougherty in view of Lewis fails with respect to Claim 2 for at least these reasons.

4.) *Conclusion*

In view of the preceding remarks, the rejections of Claims 1-8 have been overcome. Therefore, Applicant respectfully requests the withdrawal of all outstanding rejections and an issuance of a Notice of Allowance for all pending claims.

Please apply any additional fees or credits to Deposit Account #: 50-0954,

Reference #: N1569-71511.

Respectfully Submitted,

_____ 7/15/04

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